

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/018,117	12/14/2001	Joachim Guderian	GUDERIAN ET AL (PCT)	1553	
25889 7	590 04/16/2003				
WILLIAM COLLARD			EXAMINER		
	ERN BOULEVARD		TOOMER, CEPHIA D		
ROSLYN, NY	11576		ART UNIT	PAPER NUMBER	
			1714	6	
			DATE MAILED: 04/16/2003	DATE MAILED: 04/16/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
Office Action Summary		10/018,117	GUDERIAN ET AL.		
		Examiner	Art Unit		
		Cephia D. Toomer	1714		
Period fo	Th MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespond nc addr ss		
A SHOTHE I	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply repriod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).		
1) 🗌	Responsive to communication(s) filed on				
2a) <u></u> □	This action is FINAL. 2b)⊠ Th	is action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims					
	Claim(s) <u>1-27</u> is/are pending in the application				
,	4a) Of the above claim(s) is/are withdrawn from consideration.				
	5) Claim(s) is/are allowed.				
	Claim(s)state anowed.  Claim(s) <u>1,2,4-10,13-15,18-20,22-24,26 and 27</u> is/are rejected.				
\ <u>*</u>	☑ Claim(s) <u>7,2,4-70,73-73,70-20,22-24,20 and 27</u> is/are rejected. ☑ Claim(s) <u>3,11,12,16,17,21 and 25</u> is/are objected to.				
·	Claim(s) are subject to restriction and/or				
•	on Papers	, orosion roquironioni			
· —	The specification is objected to by the Examine				
10) 🔲 -	The drawing(s) filed on is/are: a)☐ accep				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) ☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ⊠ All b) ☐ Some * c) ☐ None of:					
	1. Certified copies of the priority documents have been received.				
	2. Certified copies of the priority documents have been received in Application No				
* S	3. Copies of the certified copies of the prior application from the International Bursee the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	_		
14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment	t(s)				
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u>	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)		
S Datest and Tr	-d				

Application/Control Number: 10/018,117 Page 2

Art Unit: 1714

#### **DETAILED ACTION**

### Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1, 5, 7, 10, 15, 18, 20 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 should be amended to include conventional claim language, i.e., the language "with the following steps" should read – comprising-- or – comprising the following steps --.

Regarding claims 5, 7, 10, 15, 18, 20, and 22, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

# Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Application/Control Number: 10/018,117 Page 3

Art Unit: 1714

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 4, 6, 8, 9, 13, 14, 19, 20, 22, 23, 24, 26 and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over DE 4416576.

DE teaches the manufacturing of spherical activated carbon wherein the product is prepared by mixing ground fruits, nuts or vegetable material (particle size 10-500 micrometers) that is impregnated with 2-4% aqueous Li salt solution with coal powder (particle size 10-80 micrometers) and cellulose fibers that are impregnated with the aqueous Li solution. The product also contains a phenolic binder. The resulting mixture is shaped to form spheres, dried, hardened, carbonized (300-650 C) and activated with CO<sub>2</sub> and/ or steam at 500-950 C (see CAPLUS abstract; EP abstract and DERWENT abstract). DE teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, DE differs from the claims in that it does not specifically teach that the shaped articles are dried to an overall weight of ≤ 3% by weight (claims 1 and 4). However, it would have been obvious to one of ordinary skill in the art to have dried to shaped articles to the moisture level because the articles are used to remove pollutants from liquids and it would be advantageous to have the shaped articles as moisture free as possible.

In the second aspect, DE differs from the claims in that it does not specifically teach that the shaped articles are dried on a belt dryer. However, it would have been obvious to one of ordinary skill in the art to have dried the shaped articles in this manner

Application/Control Number: 10/018,117 Page 4

Art Unit: 1714

because the manner in which DE sets forth the invention suggests sequential steps (drying, hardening, carbonizing and activating) and it would be easier to perform these steps if the shaped article is moving along a belt as each step is performed.

6. Claims 3, 11, 12, 16, 17, 21, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach that the shaped articles are dried as a gas stream is passed over or that the shaped article is dried in a three-zone torque tube. The prior art fails to teach that an aggregate is added to the binding agent; or that the binding agent is molasses, coal tar, wood charcoal tar, bitumen and/or an inorganic gel. The prior art also fails to teach that the binders are homogeneously mixed with each other before being added to that carbon-bearing material.

7. The prior art made of record and not relied upon is cited for teaching the general state of the art and is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 703-308-2509. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Application/Control Number: 10/018,117

Art Unit: 1714

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Cephia D. Toomer Primary Examiner Art Unit 1714

10\018117\6 April 14, 2003